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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/729,023

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Stefaan Margriet Albert Van Hoogenbemt

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10/06/2006

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EXAMINER

COLEMAN, ERIC

ART UNIT

PAPER NUMBER

2183

DATE MAILED: 10/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/729,023	Applicant(s) VAN HOOGENBEMT ET AL.	
	Examiner Eric Coleman	Art Unit 2183	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-6 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ganapathy (patent No. 6,832,306).

3. Ganapathy taught the invention substantially as claimed including a data processing ("DP") system comprising (as per claims 1,6):

a) Digital signal processor (ASSP) and steps to execute at least one dedicated operation of a dedicated system, characterized in that the digital signal processor is a flexible digital signal processor (e.g., see col. 3, lines 22-52 and fig. 5b and col. 10, line 62-col. 11, line 24);

b) Arithmetic and logic Unit (300) comprising plurality of inputs (and steps) to receive input data and a predefined interconnection of plurality of basic operators (e.g., see figs. 5b,8b, and col. 6, lines 43-65)[performs arithmetic operations add, multiply and logic operation min/max and in figure 5a the multiplexer selectively couple operators which would have been predefined for an instruction sequence] coupled to the plurality of input data for execution of a respective basic operation on received input data and a plurality of control inputs [inputs to control multiplexers in figs 5b] coupled

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between the predefined plurality of basic operators and program controller(e.g., see fig. 5b and col. 10, line 61-col. 11, line 24);

c) The program controller (304)(and steps) to activate the plurality of control inputs for at least one phase of a control program (e.g., see figs. 6g, 6J, 8a, 8b) of the program controller and under control of one or more basic operators of said plurality of basic operators and to enable thereby said one or more basic operators to execute its respective basic operation and to realize therewith at least part of a dedicated operation of said dedicated system (e.g., see col. 16,line 37--col. 20, line 29)[the control is clocked and therefore the controller is under control of at least one phase of the clock]; and

(d) the arithmetic and logic Unit (300) (and steps) for processing comprises a plurality of outputs (outputs of pipeline in fig. 5b for respective plural DSPs 304) to receive upon realization of each phase of the at least one phase of the control program , an output data whereby the output data represent a result of the execution of the at least one dedicated operation of the dedicated (e.g., see fig. 5b and col. 17, line 19-col. 18, line 65).

Ganapathy did not expressly detail (claims 1,6) the program was under control of an actual phase of the at least one phase of a control program. However in Ganapathy the processing of the control program was clocked (e.g., see col. 16,line 37--col. 20, line 29) and several multiplexers were enabled for processing of plural instructions.

Therefore, It would have been obvious to one of ordinary skill that a least one phase of the control program (which could comprise a subroutine or main routine or a portion of

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the program when a particular set of multiplexers were enabled) controlled the controller for processing.

4. As per claims 3,5 Ganapathy taught the flexible processor for use in gateways of communication systems to provide improved voice and data communication over packetized network. Therefore one of ordinary skill would have been motivated to provide the Ganapathy DSPs in the front end of a communication system such as a digital subscriber line at least to perform the processing tasks for data and voice that are characteristic of digital subscriber lines (e.g., see col. 3, lines 1-21)

5. As per claim 4, Ganapathy taught the performing of data/voice processing including compression/decompression etc. for data/voice therefore one of ordinary skill would have been motivated to perform operations comprising anyone of interpolation, decimation, biquad filter, infinite impulse filter, complex to real inversion and real to complex inversion at last for providing the operations for processing of network data (e.g., see col.3, lines 1-21).

Allowable Subject Matter

Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to claims 1-6 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

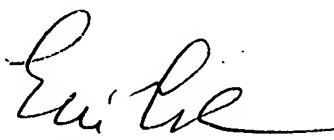
Johnson (patent No. 5,034,907) disclosed a dynamically configurable signal processor (e.g., see abstract).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Coleman whose telephone number is (571) 272-4163. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Chan can be reached on (571) 272-4162. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EC


ERIC COLEMAN
PRIMARY EXAMINER